

BDH2 Antibody (aa60-71) Goat Polyclonal Antibody Catalog # ALS16079

### Specification

# BDH2 Antibody (aa60-71) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>O9BUT1</u> Human, Monkey Goat Polyclonal 27kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

### BDH2 Antibody (aa60-71) - Additional Information

Gene ID 56898

**Other Names** 

3-hydroxybutyrate dehydrogenase type 2, 1.1.1.-, 1.1.1.30, Dehydrogenase/reductase SDR family member 6, Oxidoreductase UCPA, R-beta-hydroxybutyrate dehydrogenase, Short chain dehydrogenase/reductase family 15C member 1, BDH2, DHRS6, SDR15C1

Target/Specificity Human BDH2.

**Reconstitution & Storage** Store at -20°C. Minimize freezing and thawing.

Precautions

BDH2 Antibody (aa60-71) is for research use only and not for use in diagnostic or therapeutic procedures.

# **BDH2 Antibody (aa60-71) - Protein Information**

Name BDH2 {ECO:0000303|PubMed:35150746, ECO:0000312|HGNC:HGNC:32389}

Function

NAD(H)-dependent dehydrogenase/reductase with a preference for cyclic substrates (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>). (PubMed:<a href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>). (Catalyzes stereoselective conversion of 4-oxo-L-proline to cis-4-hydroxy-L- proline, likely a detoxification mechanism for ketoprolines (PubMed:<a

href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>). Mediates the formation of 2,5-dihydroxybenzoate (2,5-DHBA), a siderophore that chelates free cytoplasmic iron and associates with LCN2, thereby regulating iron transport and homeostasis while protecting cells against free radical-induced oxidative stress. The iron-siderophore complex is imported into



mitochondria, providing an iron source for mitochondrial metabolic processes in particular heme synthesis (By similarity). May act as a 3-hydroxybutyrate dehydrogenase (PubMed:<a href="http://www.uniprot.org/citations/16380372" target="\_blank">16380372</a>).

Cellular Location Cytoplasm.

**Tissue Location** Detected in liver (at protein level).

# BDH2 Antibody (aa60-71) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### BDH2 Antibody (aa60-71) - Images

	250kDa 150kDa 100kDa 75kDa
	50kDa
	37kDa
-	25kDa
	20kDa
	15kDa

Antibody (0.3 ug/ml) staining of Human Kidney lysate (35 ug protein in RIPA buffer).

#### BDH2 Antibody (aa60-71) - Background

Dehydrogenase that mediates the formation of 2,5- dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin and associates with LCN2, thereby playing a key role in iron homeostasis and transport. Also acts as a 3-hydroxybutyrate dehydrogenase (By similarity).

#### BDH2 Antibody (aa60-71) - References

Hu R.-M., et al. Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000). Clark H.F., et al.Genome Res. 13:2265-2270(2003). Ebert L., et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Ota T., et al.Nat. Genet. 36:40-45(2004). Hillier L.W., et al.Nature 434:724-731(2005).

